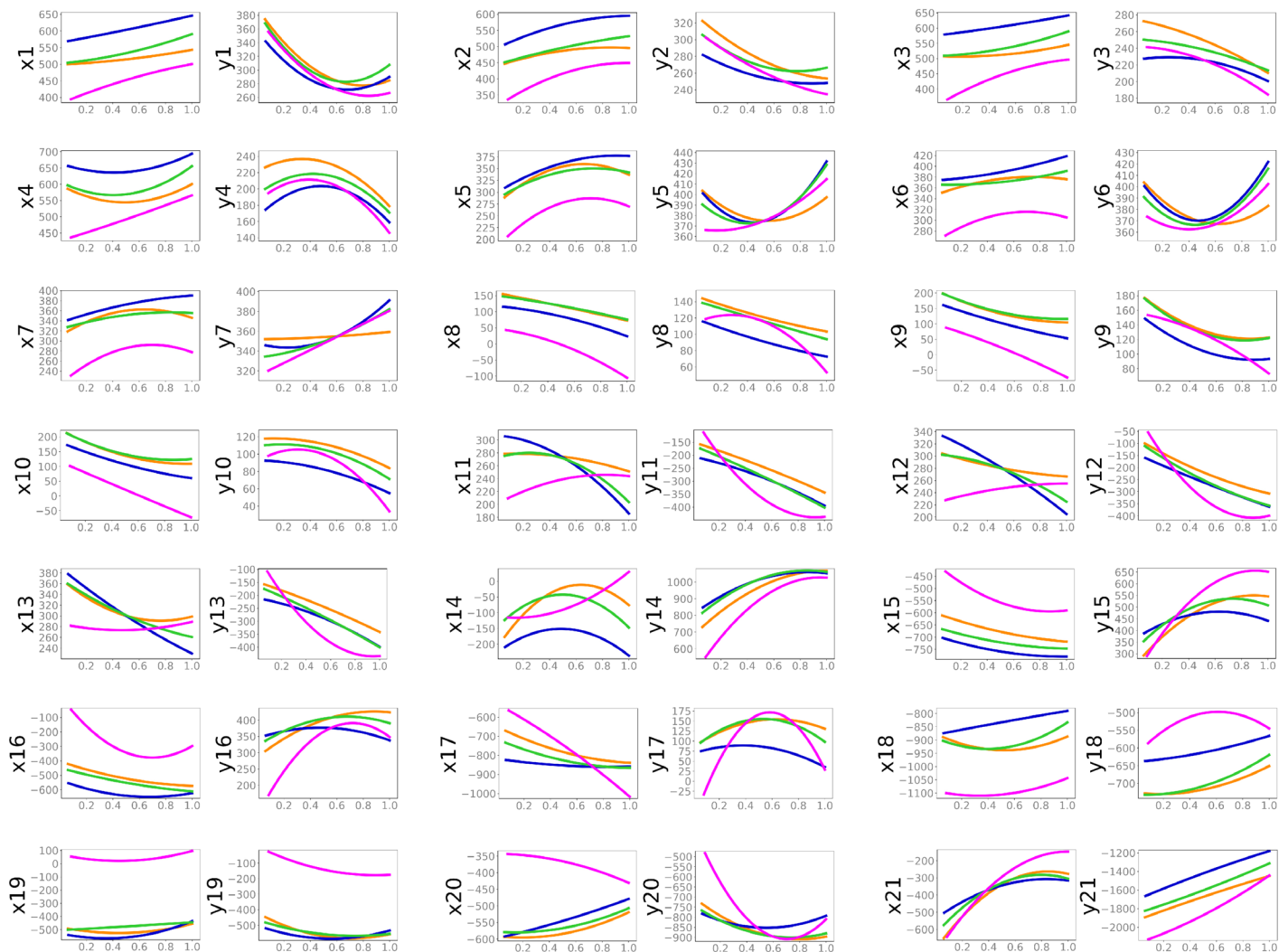


APPENDIX S1. Modeled coordinate values across grapevine shoots. For each x - and y -coordinate of the 21 landmarks, superimposed and scaled Procrustean values are modeled as a second-order polynomial of the relative node position for four species with contrasting leaf shapes. All leaves from the shoots of the indicated species are used.



Species:

- *Vitis riparia* ● *V. rupestris*
- *V. acerifolia* ● *Ampelopsis glandulosa*
var. *brevipedunculata*